



February, 4, 2008

Division of Water, Surface Water Permits Branch
ATTN: Mr. William Shane
200 Fair Oaks Lane
Frankfort, KY 40601

Subject: AI 43647; Effluent Characteristics for KY0104329

Mr. William Shane,

Please find enclosed the completed section XII of the DEP 7032SC and corresponding lab analysis. Feel free to contact me if you need anything further.

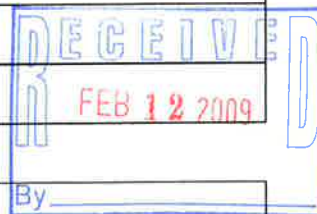
Thanks,

A handwritten signature in black ink, appearing to be 'JB' or 'Josh Brown', written over a light blue grid background.

Josh Brown
Director of Safety
270-442-5496
jbrown@fmc1.com

AT 43647

XI. COOLING WATER ADDITIVES AND THEIR COMPOSITIONS		
Additive	Composition	Concentration (mg/l)

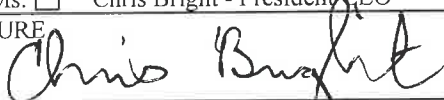


XII. EFFLUENT CHARACTERISTICS			
A. Indicate results of analysis for pollutants listed below.			
POLLUTANT/PARAMETER	MAX DAILY VALUE	AVG DAILY VALUE	NUMBER OF SAMPLES
BOD ₅	BDL		1
TOTAL SUSPENDED SOLIDS	80 MG/L	40 MG/L	1
FECAL COLIFORM	< 2 col/100 ml		1
TOTAL RESIDUAL CHLORINE	BDL		1
OIL AND GREASE	15 MG/L	10 MG/L	1
CHEMICAL OXYGEN DEMAND	200 mg/L		1
TOTAL ORGANIC CARBON	57 mg/L		1
AMMONIA	0.93 mg/L		1
DISCHARGE FLOW	10 GPM	10 GPM	1
pH	9 SU	7.5 SU	7
TEMPERATURE (WINTER)	45°F		1
TEMPERATURE (SUMMER)			

B. Frequency and duration of flow:	9.7 gpm
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XIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Mr. <input checked="" type="checkbox"/> Ms. <input type="checkbox"/> Chris Bright - President/CEO	(270) 442-5496
SIGNATURE 	DATE

Shield Env. - Lexington, KY

948 Floyd Drive
Lexington, KY 40505

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody
Page 1 of 2

Report to:

Mark Edmonson

Email:

Mark_Edmonson@shieldmw

Project Description: Federal Materials

City/State Collected

Phone: (859) 294-5155

FAX: (859) 294-5255

Client Project #:

Lab Project #

Site/Facility ID#:

P.O. #:

SHIELDKY-FEDERAL

Collected by (print):

Blake Renner

Rush? (Lab MUST Be Notified)

Date Results Needed

Collected by (signature):

Blake Renner

Same Day 200%

Next Day 100%

Two Day 50%

Three Day 25%

Packed on Ice N Y X

Sample ID

Comp/Grab

Matrix*

Depth

Date

Time

No. of Cnts

Remarks/Contaminant

Sample # (lab only)

BOD 1L-HDPE-NoPres

CHLORR 250mlHDPE-NoPres

COD 250mlHDPE-H2SO4

FC Microbiological

NH3 250mlHDPENaThioH2SO4

OGHEX 1L-Clr-Add HCl

PH 125mlHDPE-NoPres

TOC 250mlAmb-Septa-HCl

SHIELDKY (lab use only)

Completed/Relogin T55498/P269111

Code #

Shipped Via

FedEx Ground

Prepared by:

ENVIRONMENTAL

SCIENCE CORP.

12065 Lebanon Road
Mt. Juliet, TN 37122

Phone (800) 767-5859
FAX (615) 758-5859

*Matrix: SS - Soil GW - Groundwater WW - Wastewater DW - Drinking Water OT - Other

pH 7.2 Temp 45.0
Flow 9.7 GPM Other

Remarks:

Relinquished by: (Signature)

Date:

Received by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier

Condition

(lab use only)

Relinquished by: (Signature)

Date:

Received by: (Signature)

Boiler Receipt

COG Seal Intact

Y N NA

Relinquished by: (Signature)

Date:

Received for lab by: (Signature)

Date:

PH Checked

NCF

963262577 7/11



ENVIRONMENTAL
SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mark Edmonson
Shield Env. - Lexington, KY
948 Floyd Drive

Lexington, KY 40505

Report Summary

Monday January 19, 2009

Report Number: L383052

Samples Received: 01/12/09

Client Project:

Description: Federal Materials

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.



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Est. 1970

REPORT OF ANALYSIS

Mark Edmonson
Shield Env. - Lexington, KY
948 Floyd Drive
Lexington, KY 40505

January 19, 2009

Date Received : January 12, 2009
Description : Federal Materials

Sample ID : WW

Collected By : Blake B.
Collection Date : 01/09/09 08:00

ESC Sample # : L383052-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
pH (On Site)	7.2		su			
Temperature (on-site)	45.		Deg. F			
Flow Measure	9.7		gpm			
BOD	BDL	5.0	mg/l	SM5210B	01/13/09	1
Chlorine, residual	BDL	0.10	mg/l	4500Cl-G	01/13/09	1
COD	200	20.	mg/l	410.4	01/14/09	1
Coliform, fecal	<2		col/100ml	SM9222D	01/12/09	1
Ammonia Nitrogen	0.93	0.10	mg/l	350.1	01/15/09	1
pH	6.8		su	4500H-B	01/15/09	1
Oil & Grease (Hexane Extr)	BDL	6.2	mg/l	1664A	01/16/09	1
TOC (Total Organic Carbon)	57.	1.0	mg/l	5310B	01/16/09	1
Suspended Solids	6.0	1.0	mg/l	2540D	01/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 01/19/09 15:45 Printed: 01/19/09 15:45
L383052-01 (PH) - 6.8@17.9c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L383052-01	WG401778	SAMP	Chlorine, residual	R592369	T8
	WG402255	SAMP	pH	R595425	T8
	WG402115	SAMP	BOD	R597445	T8
	WG402483	SAMP	Coliform, fecal	R594486	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/19/09 at 15:45:43

TSR Signing Reports: 134
R5 - Desired TAT

No "E's" Send 2ltrs for PAH. ln 12/13/01

Sample: L383052-01 Account: SHIELDKY Received: 01/12/09 09:30 Due Date: 01/19/09 00:00 RPT Date: 01/19/09 15:45
Run FC as rec'd - MB